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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,205	10/22/2001	Rosana Kapeller-Libermann	10147-52U1 (MPI2000-438P1)	9746
7590 06/02/2004			EXAMINER	
Intellectual Property Group Millennium Pharmaceuticals, Inc. 75 Sidney Street Cambridge, MA 02139			YU, MISOOK	
			ART UNIT	PAPER NUMBER
			1642	

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/044,205

**Applicant(s)**

KAPELLER-LIBERMANN ET AL.

**Examiner**

MISOOK YU, Ph.D.

**Art Unit**

1642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 October 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23, 39, 42, 45, 47, 65, 71 and 74 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-23, 39, 42, 45, 47, 65, 71, 74 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-7, 12, and 18 as drawn to SEQ ID NO: 1, 3, and nucleic acid encoding SEQ ID NO:2 and variants thereof, vector, probe, method of producing SEQ ID NO:2 protein and variants thereof, classified in class 536, subclass 23.1.
- II. Claims 1-7, 12, and 18 as drawn to SEQ ID NO: 21, 23, and nucleic acid encoding SEQ ID NO:22 and variants thereof, vector, probe, method of producing SEQ ID NO:22 protein and variants thereof, classified in class 536, subclass 23.1.
- III. Claims 8-10 as drawn to SEQ ID NO:2 protein and variants, classified in class 530, subclass 350.
- IV. Claims 8-10 as drawn to SEQ ID NO:22 protein and variants, classified in class 530, subclass 350.
- V. Claims 11, 15 as drawn to antibody to SEQ ID NO:2 protein and variants, classified in class 530, subclass 387.1.
- VI. Claims 11, 15 as drawn to antibody to SEQ ID NO:22 protein and variants, classified in class 530, subclass 387.1.
- VII. Claims 13, 14 as drawn to method of detecting SEQ ID NO:2 protein and variants, classified in class 435, subclass 7.1.

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- VIII. Claims 13, 14 as drawn to method of detecting SEQ ID NO:22 protein and variants, classified in class 435, subclass 7.1.
- IX. Claims 16, 17 as drawn to method of detecting SEQ ID NO: 1, 3, and nucleic acid encoding SEQ ID NO:2 and variants thereof in class 435, subclass 6.
- X. Claims 16, 17 as drawn to method of detecting SEQ ID NO: 21, 23, and nucleic acid encoding SEQ ID NO:22 and variants thereof, classified in class 435, subclass 6.
- XI. Claims 19, 20, 22 as drawn to method for identifying a compound binding to SEQ ID NO:2 protein and variants thereof, or cells expressing said protein or variants, classified in class 435, subclass 15.
- XII. Claims 19, 20, 22 as drawn to method for identifying a compound binding to SEQ ID NO:22 protein and variants thereof, or cells expressing said protein or variants, classified in class 435, subclass 15.
- XIII. Claims 21, 23 as drawn to method for modulating activity of SEQ ID NO:2 protein and variants thereof using a compound binding to, unclassifiable due to an unknown nature of the compound.
- XIV. Claim 21, as drawn to method for modulating activity of SEQ ID NO:22 protein and variants thereof using a compound binding to, unclassifiable due to an unknown nature of the compound.

- XV. Claim 39, 42, 45 drawn to method of assessing and finding a compound that modulates at least one phenomenon using SEQ ID NO:2 (69087) or at least 90 % identical to SEQ ID NO:2, classified in class 435, subclass 4.
- XVI. Claim 47, 65, 71, 74 drawn to method of assessing and finding a compound that modulates phosphorylation of a MAPK, or other activities listed in claim 65 using the activity of SEQ ID NO:42 or at least 90 % protein to SEQ ID NO:42, classified in class 435, subclass 4.

The inventions are distinct, each from the other because of the following reasons:

Inventions I- VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are different products. The specification at Figs. 3, 6, and 10 discloses that instant SEQ ID NO:2, 22, and 42 are proteins with different chemical structures. The different nucleic acid molecules encoding different proteins are also different inventions, the antibodies binding to the different proteins are also different inventions.

Inventions I and (IX, XI) are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of IX, or XI.

Inventions II and (X, XII) are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of IX, or XI.

Inventions III and XV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of making an antibody.

Inventions V and VII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of purifying a protein.

Inventions VI and VIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different

process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of purifying a protein.

Inventions XIII, XIV, and XVI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different effects.

These inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification. The search required for each of the above inventions is not coextensive with regard to the literature and the sequence searches. Further, a reference which would anticipate the invention of any one group would not necessarily anticipate or make obvious the any of the other groups. For these reasons, restriction for examination purposes is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

The invention groups XV, and XVI above are directed to the following patentably distinct species listed in claims 42 and 45 for the invention group XV, also listed in claims 65, 71, and 74 for group XVI.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim



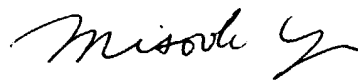
remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MISOOK YU, Ph.D. whose telephone number is 571-272-0839. The examiner can normally be reached on 8 A.M. to 5:30 P.M., every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina C Chan can be reached on 571-272-0841. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MISOOK YU, Ph.D.  
Examiner  
Art Unit 1642

A handwritten signature in cursive script, appearing to read "Misook Yu", is positioned below the printed name and title.